

# OHIO PUBLIC WORKS COMMISSION

65 East State Street, Suite 312

Columbus, Ohio 43215

(614) 466-0880

CB411

## APPLICATION FOR FINANCIAL ASSISTANCE

Revised 6/90

**IMPORTANT:** Applicant should consult the "Instructions for Completion of Project Application" for assistance in the proper completion of this form.

**APPLICANT NAME  
STREET**

Village of Glendale

30 Village Square

Glendale, Ohio

**CITY/ZIP**

45246

**PROJECT NAME**

Phase III Water Tower Replacement

**PROJECT TYPE**

Replace Failing Water Tower

**TOTAL COST**

\$ 444,000.00

**DISTRICT NUMBER  
COUNTY**

2

Hamilton

**PROJECT LOCATION ZIP CODE**

45246

91 JUL 31 4:10

OFFICE OF THE  
COUNTY ENGINEER

### DISTRICT FUNDING RECOMMENDATION

To be completed by the District Committee ONLY

**RECOMMENDED AMOUNT OF FUNDING:**

\$ 444,000.00

### FUNDING SOURCE (Check Only One):

State Issue 2 District Allocation

☐ Grant

☒ Loan

☐ Loan Assistance

☐ State Issue 2 Small Government Fund

☐ State Issue 2 Emergency Funds

☐ Local Transportation Improvement Fund

### FOR OPWC USE ONLY

OPWC PROJECT NUMBER: \_\_\_\_\_

OPWC FUNDING AMOUNT: \$ \_\_\_\_\_

# 1.0 APPLICANT INFORMATION

## 1.1 CHIEF EXECUTIVE

OFFICER

TITLE

STREET

CITY/ZIP

PHONE

FAX

Harry M. Matthews

Mayor of Glendale

Village of Glendale

30 Village Square

Glendale, Ohio 45246

( 513 ) 771 - 7200

( 513 ) 771 - 7318

## 1.2 CHIEF FINANCIAL

OFFICER

TITLE

STREET

CITY/ZIP

PHONE

FAX

Stephen Burton

Clerk/Treasurer

Village of Glendale

30 Village Square

Glendale, Ohio

( 513 ) 771 - 7200

( 513 ) 771 - 7318

## 1.3 PROJECT MGR

TITLE

STREET

CITY/ZIP

PHONE

FAX

Walter W. Cordes

Village Administrator

Village of Glendale

30 Village Square

Glendale, Ohio

( 513 ) 771 - 7200

( 513 ) 771 - 7318

## 1.4 PROJECT CONTACT

TITLE

STREET

CITY/ZIP

PHONE

FAX

Walter W. Cordes

Village Administrator

Village of Glendale

30 Village Square

Glendale, Ohio 45246

( 513 ) 771 - 7200

( 513 ) 771 - 7318

## 1.5 DISTRICT LIAISON

TITLE

STREET

CITY/ZIP

PHONE

FAX

Mr. William Brayshaw, P.E.-P.S.

Chief Deputy Engineer

Hamilton Co. Engineer's Office

223 W. Galbraith Road

Cincinnati, Ohio 45215

( 513 ) 761 - 7400

( 513 ) 761 - 9127

## 2.0 PROJECT INFORMATION

**IMPORTANT:** If project is multi-jurisdictional in nature, information must be consolidated for completion of this section.

2.1 **PROJECT NAME:** Phase III Water Rehabilitation; Water Tower

2.2 **BRIEF PROJECT DESCRIPTION - (Sections A through D):**

**A. SPECIFIC LOCATION:**

With Phase I & II in progress and due to be completed by fall of 1991, Phase III involves a water tower to be located in North/West Glendale (highest point) and will serve all residents of Glendale.

**B. PROJECT COMPONENTS:**

Replace an aged (1928) existing water tower (currently located at 528 E. Sharon Ave.) with a new tower to be located at Washington Park (highest elevation). Tower: Sphere construction, 250,000 gallons, 100' min. elevation, to tie into new distribution systems of Phase I and II. Cost estimates include components, controls, labor and contingencies.

**C. PHYSICAL DIMENSIONS/CHARACTERISTICS:**

Replacement of failing 200,000 gallon water tower, located in a poor location, with 250,000 gallon water tower in a higher location. Current tower has exceeded life expectancy.

**D. DESIGN SERVICE CAPACITY:**

**IMPORTANT:** Detail shall be included regarding current service capacity vs proposed service level. If road or bridge project, include ADT. If water or wastewater project, include current residential rates based on monthly usage of 7,756 gallons per household.

Glendale produces and distributes well water to 920 residential users since 1902. Our current rate for water (based on 7,756 gallons per household per month) is \$ 20.70.

An extensive report, attached, indicates that Glendale lacks distribution ability, lacks capacity for additional users and has inferior fire protection ability. Project approval will greatly benefit fire fighting ability, enhance distribution ability, provide a "24" hour supply on storage water and replaced an existing and failing water storage tank.

2.3 **REQUIRED SUPPORTING DOCUMENTATION**

(Photographs/Additional Description; Capital Improvements Report; Priority List; 5-year Plan; 2-year Maintenance of Effort report, etc.) Also discuss the number of temporary and/or fulltime jobs which are likely to be created as a result of this project. Attach Pages. Refer to accompanying Instructions for further detail. Enclosed: 1990 water distribution study by Woolpert Consultants, 5 year plan, 2 year maintenance of effort, and water distribution map with projects I, II, and III highlighted.

### 3.0 PROJECT FINANCIAL INFORMATION

#### 3.1 PROJECT ESTIMATED COSTS (Round to Nearest Dollar):

a)	Project Engineering Costs:	
	1. Preliminary Engineering	\$ _____
	2. Final Design	\$ _____
	3. Construction Supervision	\$ _____
b)	Acquisition Expenses	
	1. Land	\$ _____
	2. Right-of-Way	\$ _____
c)	Construction Costs	\$ 404,000.00
d)	Equipment Costs	\$ _____
e)	Other Direct Expenses	\$ _____
f)	Contingencies	\$ 40,000.00
g)	<b>TOTAL ESTIMATED COSTS</b>	<b>\$ 444,000.00</b>

#### 3.2 PROJECT FINANCIAL RESOURCES (Round to Nearest Dollar and Percent)

	Dollars	%
a)	Local In-Kind Contributions *	\$ _____
b)	Local Public Revenues	\$ _____
c)	Local Private Revenues	\$ _____
d)	Other Public Revenues	
	1. ODOT	\$ _____
	2. FMHA	\$ _____
	3. OEPA	\$ _____
	4. OWDA	\$ _____
	5. CDBG	\$ _____
	6. Other _____	\$ _____
e)	OPWC Funds	
	1. Grant	\$ _____
	2. Loan	\$ 444,000.00 100
	3. Loan Assistance	\$ _____
f)	<b>TOTAL FINANCIAL RESOURCES</b>	<b>\$ 444,000.00 100</b>

\* If the required local match is to be 100% In-Kind Contributions, list source of funds to be used for retainage purposes:

#### 3.3 AVAILABILITY OF LOCAL FUNDS

Indicate the status of all local share funding sources listed in section 3.2(a) through 3.4(c). In addition, if funds are coming from sources listed in section 3.2(d), the following information must be attached to this project application:

- 1) The date funds are available;
- 2) Verification of funds in the form of an agency approval letter or agency project number. Please include the name and number of the agency contact person.

### 3.4 PREPAID ITEMS

#### Definitions:

<b>Cost -</b>	Total Cost of the Prepaid Item.
<b>Cost Item -</b>	Non-construction costs, including preliminary engineering, final design, acquisition expenses (land or right-of-way).
<b>Prepaid -</b>	Cost items (non-construction costs directly related to the project), paid prior to receipt of fully executed Project Agreement from OPWC.
<b>Resource Category -</b>	Source of funds (see section 3.2).
<b>Verification -</b>	Invoice(s) and copies of warrant(s) used to for prepaid costs, accompanied by Project Manager's Certification (see section 1.4).

**IMPORTANT:** Verification of all prepaid Items shall be attached to this project application.

	<u>COST ITEM</u>	<u>RESOURCE CATEGORY</u>	<u>COST</u>
1)	_____	_____	\$ _____
2)	_____	_____	\$ _____
3)	_____	_____	\$ _____
TOTAL OF PREPAID ITEMS			\$ _____

### 3.5 REPAIR/REPLACEMENT or NEW/EXPANSION

This section need only be completed if the Project is to be funded by SI2 funds:

<b>TOTAL PORTION OF PROJECT REPAIR/REPLACEMENT</b>	\$ <u>444,000.00</u>	<u>100</u> %
State Issue 2 Funds for Repair/Replacement (Not to Exceed 90%)	\$ <u>444,000.00</u>	<u>100*</u> %
	*SI2 Loan Application	
<b>TOTAL PORTION OF PROJECT NEW/EXPANSION</b>	\$ _____	_____ %
State Issue 2 Funds for New/Expansion (Not to Exceed 50%)	\$ _____	_____ %

### 4.0 PROJECT SCHEDULE

	ESTIMATED START DATE	ESTIMATED COMPLETE DATE
4.1 ENGR. DESIGN	<u>02 / 01 / 92</u>	<u>04 / 01 / 92</u>
4.2 BID PROCESS	<u>04 / 15 / 92</u>	<u>05 / 01 / 92</u>
4.3 CONSTRUCTION	<u>05 / 15 / 92</u>	<u>07 / 20 / 92</u>

## 5.0 APPLICANT CERTIFICATION

The Applicant Certifies That:

As the official representative of the Applicant, the undersigned certifies that: (1) he/she is legally empowered to represent the applicant in both requesting and accepting financial assistance as provided under Chapter 164 of the Ohio Revised Code and 164-1 of the Ohio Administrative Code; (2) that to the best of his/her knowledge and belief, all representations that are a part of this application are true and correct; (3) that all official documents and commitments of the applicant that are a part of this application have been duly authorized by the governing body of the Applicant; (4) and, should the requested financial assistance be provided, that in the execution of this project, the Applicant will comply with all assurances required by Ohio law, including those involving minority business utilization, Buy Ohio, and prevailing wages.

**IMPORTANT:** Applicant certifies that physical construction on the project as defined in this application has not begun, and will not begin, until a Project Agreement on this project has been issued by the Ohio Public Works Commission. Action to the contrary is evidence that OPWC funds are not necessary to complete this project.

**IMPORTANT:** In the event of a project cost underrun, applicant understands that the identified local match share (sections 3.2(a) through 3.2(c)) will be paid in full toward completion of this project. Unneeded OPWC funds will be returned to the funding source from which the project was financed.

Walter W. Cordes, Village Administrator

Certifying Representative (Type Name and Title)

Walter W. Cordes 7/25/91

Signature/Date Signed

Applicant shall check each of the statements below, confirming that all required information is included in this application:

<u>X</u>		A five-year Capital Improvements Report as required in 164-1-31 of the Ohio Administrative Code and a <u>two-year Maintenance of Local Effort Report</u> as required in 164-1-12 of the Ohio Administrative Code.
<u>X</u>		A registered professional engineer's estimate of useful life as required in 164-1-13 of the Ohio Administrative Code. Estimate shall contain engineer's <u>original seal and signature</u> .
<u>X</u>		A registered professional engineer's estimate of cost as required in 164-1-14 and 164-1-16 of the Ohio Administrative Code. Estimate shall contain engineer's <u>original seal and signature</u> .
<u>X</u>		A certified copy of the legislation by the governing body of the applicant authorizing a designated official to submit this application and to execute contracts.
<u>X</u>	YES N/A	A copy of the cooperation agreement(s) (for projects involving more than one subdivision or district).
<u>X</u>	YES N/A	Copies of all invoices and warrants for those items identified as "pre-paid" in section 4.4 of this application.

## 6.0 DISTRICT COMMITTEE CERTIFICATION

The District Integrating Committee for District Number 2 Certifies That:

As the official representative of the District Public Works Integrating Committee, the undersigned hereby certifies: that this application for financial assistance as provided under Chapter 164 of the Ohio Revised Code has been duly selected by the appropriate body of the District Public Works Integrating Committee; that the project's selection was based entirely on an objective, District-oriented set of project evaluation criteria and selection methodology that are fully reflective of and in conformance with Ohio Revised Code Sections 164.05, 164.06, and 164.14, and Chapter 164-1 of the Ohio Administrative Code; and that the amount of financial assistance hereby recommended has been prudently derived in consideration of all other financial resources available to the project. As evidence of the District's due consideration of required project evaluation criteria, the results of this project's ratings under such criteria are attached to this application.

Donald C. Schramm, Chairperson District 2 Integrating Committee  
Certifying Representative (Type Name and Title)

Donald C. Schramm 9/24/91  
Signature/Date Signed

FIVE YEAR OVERALL CAPITAL  
IMPROVEMENT PLAN: INFRASTRUCTURE

1991

The Village of Glendale has had a modest Capital Improvement program for the past decade. Most improvements relative to Village structures have been in the way of emergency replacement of collapsed sewers, deteriorating roadway patching and mandated improvements of waste water treatment facilities. Very little money has or is available to properly restore roadways, replace water mains and or rebuild/replace sewers.

As much of our approximate \$1,090,000 budget is used for necessary operations, other fund sources have been heavily relied upon for infrastructure improvements. A unique "Village Plan and General Improvement Fund" has been heavily relied upon for its interest to fund the general operations. Reduction of the VPGI Fund's principal causes significant reduction in needed interest income and is strongly discouraged. Please note that Glendale has been consistent in the amount of local funds spent for infrastructure repairs/improvements and that in no way would Issue 2 defer what the Village of Glendale is and can spend for capital needs. Issue 2 will allow the village to restore infrastructure that is in poor condition and that is not being repaired due to insufficient funds.

OVERALL CAPITAL PROGRAM:

1990 Tar and Chip Program:	\$ 30,500
Erie Ave	
Fountain Ave	
Wood Ave	
Magnolia Ave	
S. Lake Ave	
Coral (partial) Ave	
Oak (partial) Ave	
Street Construction & Repair:	\$ 19,500
Sharon Rd (Patch/Paint)	
Overall line striping	
Patch/seal interior lanes	
State Highway Improvement Fund:	\$ 4,100
Congress (SR747) repairs	
Replace 2ph controller-RT4 & Sharon	
Issue 2 Grant:	\$217,350
Restore Chester Road ('89 Grant)	
TOTAL 1990 EXPENDITURE PROJECTIONS:	\$271,450



1991 Tar and Chip Program:	\$ 23,000
E. Fountain (partial) Ave	
W. Fountain Ave	
Village Square	
Greenville Ave	
Ivy Ave	
Street Construction & Repair:	\$ 20,000
Morris Rd	
All Line striping	
State Highway Improvement Fund:	\$ 3,000
Congress (SR747) - patch / paint	
Issue 2 Grant:	\$313,000
Sharon Road Restoration ('90 Grant)	
Capital Improvement Fund:	\$ 30,000
Sidewalks	
Town Hall roof restoration	
Issue 2 Grant/Loan:	\$378,460
Phase 1 water main restoration	
(only with approval of '91 application)	
TOTAL 1991 EXPENDITURE PROJECTIONS:	\$767,460

1992 Tar and Chip Program	\$23,000
S. Troy Ave	
Albion Ave	
Magnolia Ave	
Wood Ave	
Street Construction & Repair	22,000
Chester Road Storm pipes	
line striping, overall	
Glendale Rd.	
State Hwy Improvement Fund	9,500
Congress (747) PM	
Capital Improvement Fund	50,000
Phase 2 of Village Office	
Issue 2 Loan/Grant	466,000
Phase III Water (Tower)	
Total 1992 Expenditure Projections:	\$ 570,500.

1993 Tar and Chip Program:	\$ 23,500
Erie Ave	
Lincoln Ave	
Annadale Ave	
Summit Rd	
Street Construction & Repair:	\$ 20,000
Sharon Rd Storm water improvements	
Line stripe interior roads	
State Highway Improvement Fund:	\$ 3,100
Congress (747) patch/paint	
2PH controller rebuild, 747/Sharon	
Capital Improvement Fund:	\$ 40,000
Town Hall elevator project	
Sidewalks, village wide	
Issue 2 Grant/Loan:	\$284,500
Phase 4 water main restoration	
(only with approval of '93 application)	
TOTAL 1993 EXPENDITURE PROJECTION:	\$371,100

1994 Tar and Chip Program:	\$ 25,000
Cole Ave	
Congress Ave	
Willow Ave	
Little Creek	
Osprey Ln	
Street Construction and Repair:	\$ 21,000
All Village line strip	
Curbing replacement, interior roads	
Grader patching	
State Highway Improvement Fund:	\$ 4,200
Congress (747) patch/paint	
3ph controller replacement Rt4/Sharon	
Capital Improvement Fund:	\$ 31,200
Sidewalks, village wide	
Water Works, lime tank restoration	
Street Maint., parking lot improvement	
Issue 2 Grant/Loan:	
Phase 5 Water main restoration	\$276,000
(only with approval of '94 application)	
TOTAL 1994 EXPENDITURE PROJECTION:	\$357,400

1995 Tar and Chip Program:	\$ 18,500
N. Lake Ave.	
Cole Ave.	
Morse Ave.	
Church Ave.	
Street Construction & Repair:	\$ 21,000
All village line striping	
Curbing replacement/repair	
All village grader patching	
State Highway Improvement Fund:	\$ 3,200
Congress (747) patch/paint	
Rt 4 paint	
Capital Improvement Fund:	\$155,000-
Sidewalks, village wide	
Modernization of Administrative office &	
Post Office.	
Well Controls	15,000
 TOTAL 1995 EXPENDITURE PROJECTIONS	 \$212,700.

30 VILLAGE SQUARE  
GLENDALE, OHIO 45246

PREVIOUS CAPITAL IMPROVEMENT BUDGETS

YEAR	PROJECT NAME	FUNDING SOURCE			ISSUE II	PROJECT TOTAL
		OTHER	LOCAL	MRF	CD	
1988	Street Program (Tar & Chip)		X			15.5
1988	Police Station Rebuild		X			126.0
1988	Recycling Center Rebuild		X			3.5
1988	Fuel Storage Tank					
	conformance to state stds.		X			2.3
1988	Sidewalk, phase II rebuild		X			9.2
						YEAR TOTAL: 156.5 (Thousand)
1989	Street Program		X			21.0
1989	Sidewalk, phase III rebuild		X			6.4
1989	Sidewalk bridge replacement		X			4.5
1989	Village parking lot rebuild		X			1.7
1989	Sewage Plant settling basin		X			7.3
1989	Street construction & repair	X				20.0
1989	State Hwy improvements	X				2.6
1989	North Troy CD rebuild				X	57.0
						YEAR TOTAL: 120.5 (Thousand)
1990	Street Program		X			30.5
1990	Laggon's Rebuild		X			9.8
1990	Sidewalk, Phase IV		X			2.3
1990	Street Const. & Repair	X				10.0
1990	State Hwy Improvements	X				3.2
1990	Chester Rd, Issue 2 ('89)				X	217.4
1990	Municipal Bldg. Roofing		X			4.0
1990	High Service Fire Hyd.		X			13.5
1990	Police Computer Install		X			5.0
						YEAR TOTAL: 295.7 (Thousand)

PREVIOUS CAPITAL IMPROVEMENT BUDGETS

YEAR	PROJECT NAME	<u>CONTINUED</u>				CD	ISSUE2	TOTAL:
		OTHER	LOCAL	MRF				
1991	Phase I Water **				X			100.0
1991	Phase II Water **					X		352.5
1991	Street Program		X					27.0
1991	State Hwy Imp.	X						9.5
1991	Sewage Plant		X					5.5
							YEAR TOTAL:	494.0

\* In Thousands

\*\* In progress, 1991

**Opinion of Construction Cost  
Village of Glendale, Ohio  
Elevated Water Storage Tank**

250,000 gallon capacity tank located in park at Washington and Cole Avenues

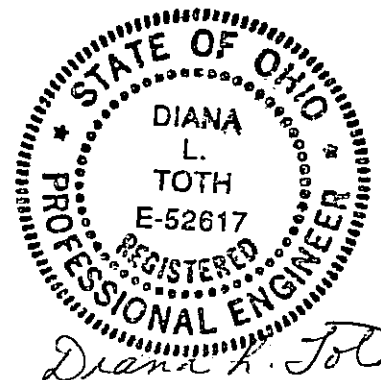
<u>Item Description</u>	<u>Unit</u>	<u>Qty</u>	<u>Unit Price</u>	<u>Total</u>
Furnish & Install Elevated Tank @ 100' Above Ground Storage (Foundation included)	Ea.	1	\$365,000.00	\$365,000.00
Pumps & Controls	Ea.	2	\$15,000.00	\$30,000.00
Furnish & Install 8" Pipe (including excav., bedding, backfill)	L.F.	100	\$40.00	\$4,000.00
Valves & Fittings (including tie-in to main)	L.S.	1	\$5,000.00	\$5,000.00
Contingencies @ 10% ±				\$40,000.00
Total Construction Cost:				\$444,000.00
Engineering Design:				<u>\$22,000.00</u>
TOTAL COST:				\$466,000.00

By: WOOLPERT CONSULTANTS

Diana L. Toth      7-8-91  
Diana L. Toth, P.E.      Date

OPINION OF CONSTRUCTION COST IS SUBJECT TO ADJUSTMENT  
UPON DETAIL PLAN COMPLETION AND UPON REQUEST OF BIDS BY  
QUALIFIED CONTRACTORS.

USEFUL LIFE - UPON SATISFACTORY COMPLETION OF WORK, THE  
USEFUL LIFE OF THE PUMPS WILL BE 20 YEARS, AND THE WATER  
TANK WILL BE 100 YEARS.





AN ORDINANCE DECLARING A ONE YEAR MORATORIUM IN  
ISSUING SPECIAL PERMITS FOR THE INSTALLATION OF  
IN-GROUND LAWN SPRINKLERS

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BE IT ORDAINED, by the Council of the Village of Glendale, State of Ohio, three-fourths of all members elected thereto concurring:

WHEREAS, the Village of Glendale has conferred with its engineers, Woolpert consultants, pertaining to the adequacy of the current water supply in light of the use of the in-ground lawn sprinkling systems and that it was its engineers' recommendation that a study would be required; and


WHEREAS, such study is completed and is being considered by the Utilities Committee, the Village of Glendale has determined its water system is inadequate and during such time of inadequacy the installation of new in-ground lawn sprinkling systems should not be permitted.

BE IT ORDAINED, by the Council of the Village of Glendale, State of Ohio, three-fourths of all members elected thereto concurring:

SECTION I: That due to the inadequacy of the water supply capacity of the village of Glendale, a one year moratorium with respect to the issuance of the special permit for in-ground lawn sprinkling systems is hereby declared, which moratorium extends to January 7, 1992.

SECTION II: This ordinance is hereby declared to be an emergency measure for the purpose of the timely and efficient administration of Village affairs and shall take effect immediately upon its passage.

PASSED: January 7, 1991

  
\_\_\_\_\_  
Harry M. Matthews, Mayor

ATTEST:

  
\_\_\_\_\_  
Stephen H. Burton, Clerk

COPY

VILLAGE OF GLENDALE

Resolution 1991- 19

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RESOLUTION AUTHORIZING THE VILLAGE ADMINISTRATOR  
TO MAKE APPLICATION FOR STATE ISSUE 2 FUNDS

WHEREAS, the District 2 integrating committee requires documentation of authenticity for each Issue 2 application

WHEREAS, the 1992 Issue 2 application is due no later than August 1, 1991, and

WHEREAS, The Village Mayor, Council and Utility Committee recognize the urgency of certain recommended refurbishments of the existing water storage facilities of the water system in Glendale, and

WHEREAS, A moratorium was passed by Council to prevent additional lawn irrigation systems to our current system, prior to its improvements, and

The Village of Glendale is unable to fund said refurbishments without a grant/low interest/no interest loan under the provisions of the District 2 and Ohio Public Works Commission.

BE IT RESOLVED, by the Village Council of the Village of Glendale that the Village Administrator is to make timely application to the district 2 Integrating Committee and the Ohio Public Works Commission for financial assistance in the strategic replacement of the water storage facility of the Glendale Water Works, representing phase III of prior recommendations of a 1990 engineering study.

Passed August 5th, 1991

**COPY**

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Harry M. Matthews, Mayor

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Stephen H. Burton, Clerk

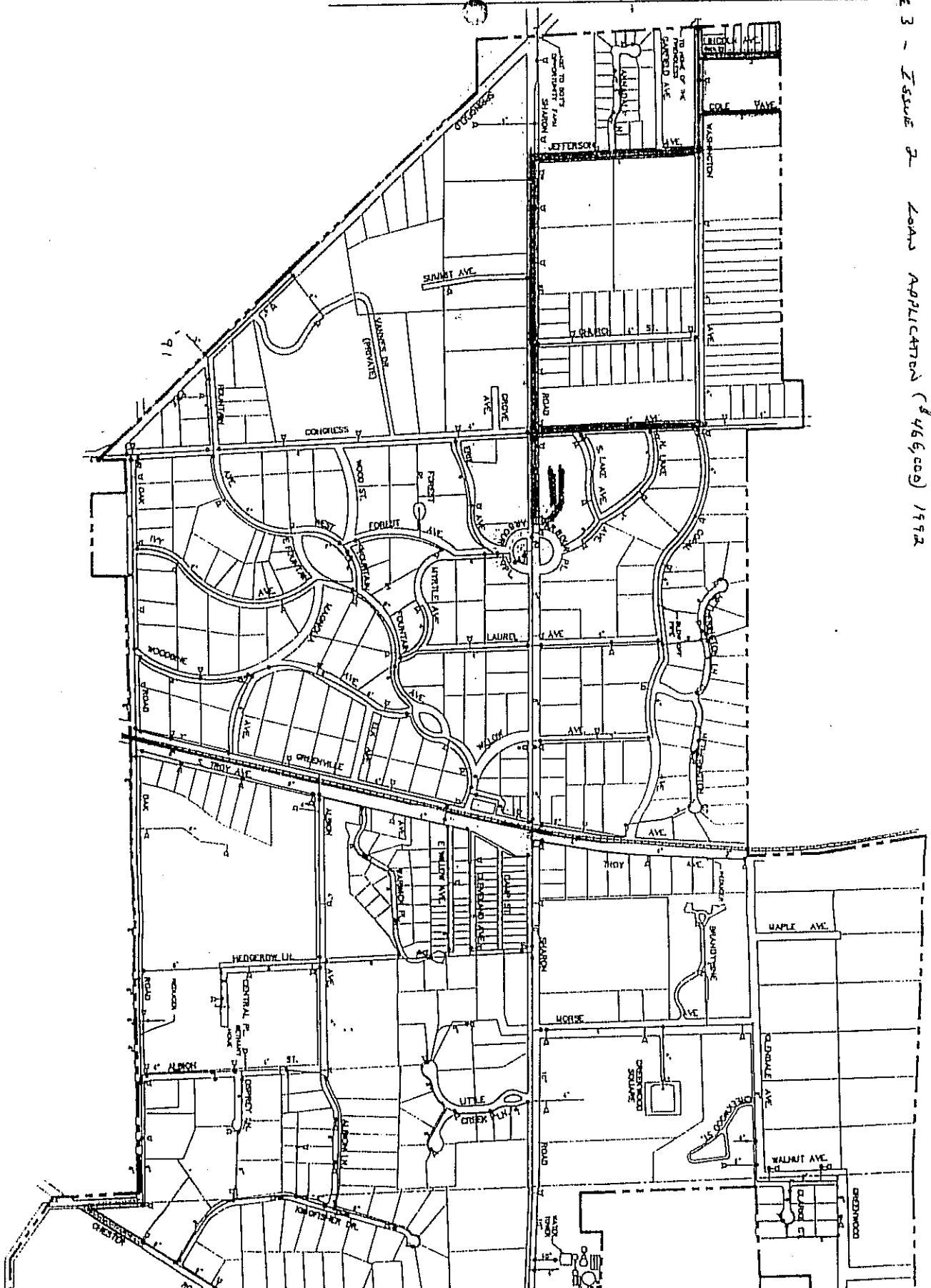
\* Pending resolution\*for 8/5/91 Council meeting. W. Cordes to contact Integrating Committee if not passed. WWC

Phase 2 - C. D. GRANT (\$100,000); IN PROGRESS 1991

Phase 1 - Issue 2 0% Loan (\$352,440); IN PROGRESS 1991

Phase 3 - Issue 2 Loan Application (\$466,000) 1992

# VILLAGE OF GLENDALE EXISTING WATER DISTRIBUTION SYSTEM MAP



## ADDITIONAL SUPPORT INFORMATION

For 1992, jurisdictions shall complete the State application form for Issue 2, Small Government, or Local Transportation Improvement Program (LTIP) funding. In addition, the District 2 Integrating Committee requests the following information to determine which projects are funded. Information provided on both forms should be accurate, based on reliable engineering principles. Do NOT request a specific type of funding desired, as this is decided by the District Integrating Committee.

1. Of the total infrastructure within the jurisdiction which is similar to the infrastructure of this project, what percentage can be classified as being in poor condition, adequacy and/or serviceability? Accurate support information, such as pavement management inventories or bridge condition summaries, should be provided to substantiate the stated percentage.

Typical examples are:

Road percentage=  $\frac{\text{Miles of road that are in poor condition}}{\text{Total miles of road within jurisdiction}}$

Storm percentage=  $\frac{\text{Miles of storm sewers that are in poor condition}}{\text{Total miles of storm sewers within jurisdiction}}$

Bridge percentage=  $\frac{\text{Number of bridges that are in poor condition}}{\text{Number of bridges within jurisdiction}}$

One (1) water tower is owner/operated by Glendale.

100% is poor (deteriorated) & inadequate.

2. What is the condition of the existing infrastructure to be replaced, repaired, or expanded? For bridges, base condition on latest general appraisal and condition rating.

Closed	_____	Poor	<u>  X  </u>
Fair	_____	Good	_____

Give a brief statement of the nature of the deficiency of the present facility such as: inadequate load capacity (bridge); surface type and width; number of lanes; structural condition; substandard design elements such as berm width, grades, curves, sight distances, drainage structures, or inadequate service capacity. If known, give the approximate age of the infrastructure to be replaced, repaired, or expanded.

Inadequate capacity, severe rust on interior liner, stand pipe

& support struts. built in 1928 (64 years old). Tower has

exceeded its life expectancy.

3. If State Issue 2 funds are awarded, how soon (in weeks or months) after completion of the agreement with OPWC would the opening of bids occur? The Integrating Committee will be reviewing schedules submitted for previous projects to help judge the accuracy of a particular jurisdiction's anticipated schedule.

Please indicate the current status of the project development by circling the appropriate answers below. PROVIDE ACCURATE ESTIMATE.

- a) Has the Consultant been selected?..... Yes No N/A
- b) Preliminary development or engineering completed? Yes No N/A
- c) Detailed construction plans completed?..... Yes No N/A
- d) All right-of-way acquired?..... Yes No N/A
- e) Utility coordination completed?..... Yes No N/A

Give estimate of time, in weeks or months, to complete any item above not yet completed.

(c) Detailed Plans - 8 weeks

4. How will the proposed infrastructure activity impact the general health, welfare, and safety of the service area? (Typical examples include the effects of the completed project on accident rates, emergency response time, fire protection, health hazards, user benefits, and commerce.)

A new & larger tower will insure 1 day reserve, improve pressure, enhance distribution, and increase fire fighting ability.

5. For any project involving GRANTS, the local jurisdiction must provide a MINIMUM OF 10% of the anticipated construction cost. Additionally, the local jurisdiction must pay 100% of the costs of preliminary engineering, inspection, and right-of-way. If a project is to be funded under Issue 2 or Small Government, the costs of any betterment/expansion are 100% local. Local matching funds must either be currently on deposit with the jurisdiction, or certified as having been approved or encumbered by an outside agency (MRF, CDBG, etc.). Proposed funding must be shown on the Project Application under Section 3.2, "Project Financial Resources". For a project involving LOANS or CREDIT ENHANCEMENTS, 100% of construction costs are eligible for funding, with no local match required.

What matching funds are to be used for this project? (i.e. Federal, State, MRF, Local, etc.)

-N/A-

To what extent are matching funds to be utilized, expressed as a percentage of anticipated CONSTRUCTION costs?

-N/A-

6. Has any formal action by a federal, state, or local government agency resulted in a complete ban or partial ban of the use or expansion of use for the involved infrastructure? (Typical examples include weight limits, truck restrictions, and moratoriums or limitations on issuance of new building permits.) THE BAN MUST HAVE AN ENGINEERING JUSTIFICATION TO BE CONSIDERED VALID.

COMPLETE BAN \_\_\_\_\_

PARTIAL BAN   X  

NO BAN \_\_\_\_\_

Will the ban be removed after the project is completed? YES   X   NO \_\_\_\_\_

Document with specific information explaining what type of ban currently exists and what agency that imposed the ban.

A current moratorium is in effect preventing additional

lawn irrigation systems in Glendale. Pending Phase I, II

& III completions.

7. What is the total number of existing users that will benefit as a result of the proposed project? Use specific criteria such as households, traffic counts, ridership figures for public transit, daily users, etc., and equate to an equal measurement of users:

900 Households; 3,600 Daily users.

For roads and bridges, multiply current documented Average Daily Traffic by 1.2 occupants per car (I.T.E. estimated conversion factor) to determine users per day. Ridership figures for public transit must be documented. Where the facility currently has any restrictions or is partially closed, use documented traffic counts prior to restriction. For storm sewers, sanitary sewers, water lines, and other related facilities, multiply the number of households in the service area by four (4) to determine the approximate number of users per day.

8. The Ohio Public Works Commission requires that all jurisdictions applying for project funding develop a five year overall Capital Improvement Plan that shall be updated annually. The Plan is to include an inventory and condition survey of existing capital improvements, and a list detailing a schedule for capital improvements and/or maintenance. Both Five-Year Overall and Five-Year Issue 2 Capital Improvement Plans are required.

Copies of these Plans are to be submitted to the District Integrating Committee at the same time the Project Application is submitted.

9. Is the infrastructure to be improved part of a facility that has regional significance? (Consider the number of jurisdictions served, size of service area, trip lengths, functional classification, and length of route.) Provide supporting information.

Glendale currently sells an average of 2.8 million gallons

of water per year to outside consumers (Bulk Water Sales).

Village Office / Municipal Building  
30 Village Square  
Glendale, Ohio 45246

Age: 120 years  
Condition: Good  
Construction: Brick  
Apx. Sq. Footage: 2,800

The Village municipal office is in relatively good condition for its age. It currently serves the needs of the Administrative staff and a satellite Post Office for the Village residents. Targeted in 1990 or '91 is a complete office renovation expected to cost \$100,000.

Police Department  
305 E. Sharon Road  
Glendale, Ohio 45246

Age: 118 years  
Condition: Excellent  
Construction: Brick  
Apx. Sq. Footage: 2,000

The Village of Glendale Police Department was recently renovated for \$135,000 and now meets all state and local standards for office facilities and jailing. It houses two jail cells, property room, locker room, interview room, two offices, a squad room and shower facilities. The police department meets our current and projected needs for the next 10 years and will require no major capital expenditures.

Glendale Town Hall  
80 E. Sharon Road  
Glendale, Ohio 45246

Age: 114 years  
Condition: Average/Fair  
Construction: Brick  
Apx. Sq. Footage: 3,600

The Village of Glendale Town Hall houses the council chambers, two restrooms, a stage area, and an auditorium for use by various civic organizations. It is used continuously by one group or another. Currently, the original slate roof is in serious need of replacement (\$15,000) and the exterior wood trim requires repair and painting (\$7,500). In addition, there are various interior paint and plaster needs (\$5,000). Considering the buildings age and use, it has been well preserved.

Glendale Fire Department  
80 E Sharon Road  
Glendale, Ohio 45246

Age: 114 years  
Condition: Average/Fair  
Construction: Brick/frame  
Apx. Sq. Footage: 2,100

The Village of Glendale Fire Department is attached to the Town Hall and was built at the same time. Currently, it is used to house two fire trucks, a salvage van, miscellaneous supplies and materials/equipment, etc. Presently, there are 17 volunteer firemen assigned to the department. The firemen are currently remodeling the office portion of the Fire Department and well as the break room. Much of the work is volunteer and the funds required do not exceed \$500.

Glendale Water Works  
2779 Sharon Road  
Evendale, Ohio 45241

Age: 82 years  
Condition: Average/Fair  
Construction: Brick/Frame  
Apx. Sq. Footage: 4,200

The Village of Glendale processes its own water from two aquifer well located in Evendale (off Sharon Rd.) Presently, we pump, filter, and process approximately 350,000 gallons of fresh water per 24 hour day. The plant has a settling capacity of 200,000 gallons and an additional storage capacity of 200,000 gallons in a nearby water tower located on the grounds of 528 Sharon Rd. As the plant is heavily used, much of the equipment requires constant maintenance and replacement. Presently, much of the deteriorated decking, roof, windows, and filters are being replaced via funds from the enterprise account. The plant is presently self supporting.

Village Office / Municipal Building  
30 Village Square  
Glendale, Ohio 45246

Age: 120 years  
Condition: Good  
Construction: Brick  
Apx. Sq. Footage: 2,800

The Village municipal office is in relatively good condition for its age. It currently serves the needs of the Administrative staff and a satellite Post Office for the Village residents. Targeted in 1990 or '91 is a complete office renovation expected to cost \$100,000.

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Police Department  
305 E. Sharon Road  
Glendale, Ohio 45246

Age: 118 years  
Condition: Excellent  
Construction: Brick  
Apx. Sq. Footage: 2,000

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80 E. Sharon Road  
Glendale, Ohio 45246

Age: 114 years  
Condition: Average/Fair  
Construction: Brick  
Apx. Sq. Footage: 3,600

The Village of Glendale Town Hall houses the council chambers, two restrooms, a stage area, and an auditorium for use by various civic organizations. It is used continuously by one group or another. Currently, the original slate roof is in serious need of replacement (\$15,000) and the exterior wood trim requires repair and painting (\$7,500). In addition, there are various interior paint and plaster needs (\$5,000). Considering the buildings age and use, it has been well preserved.

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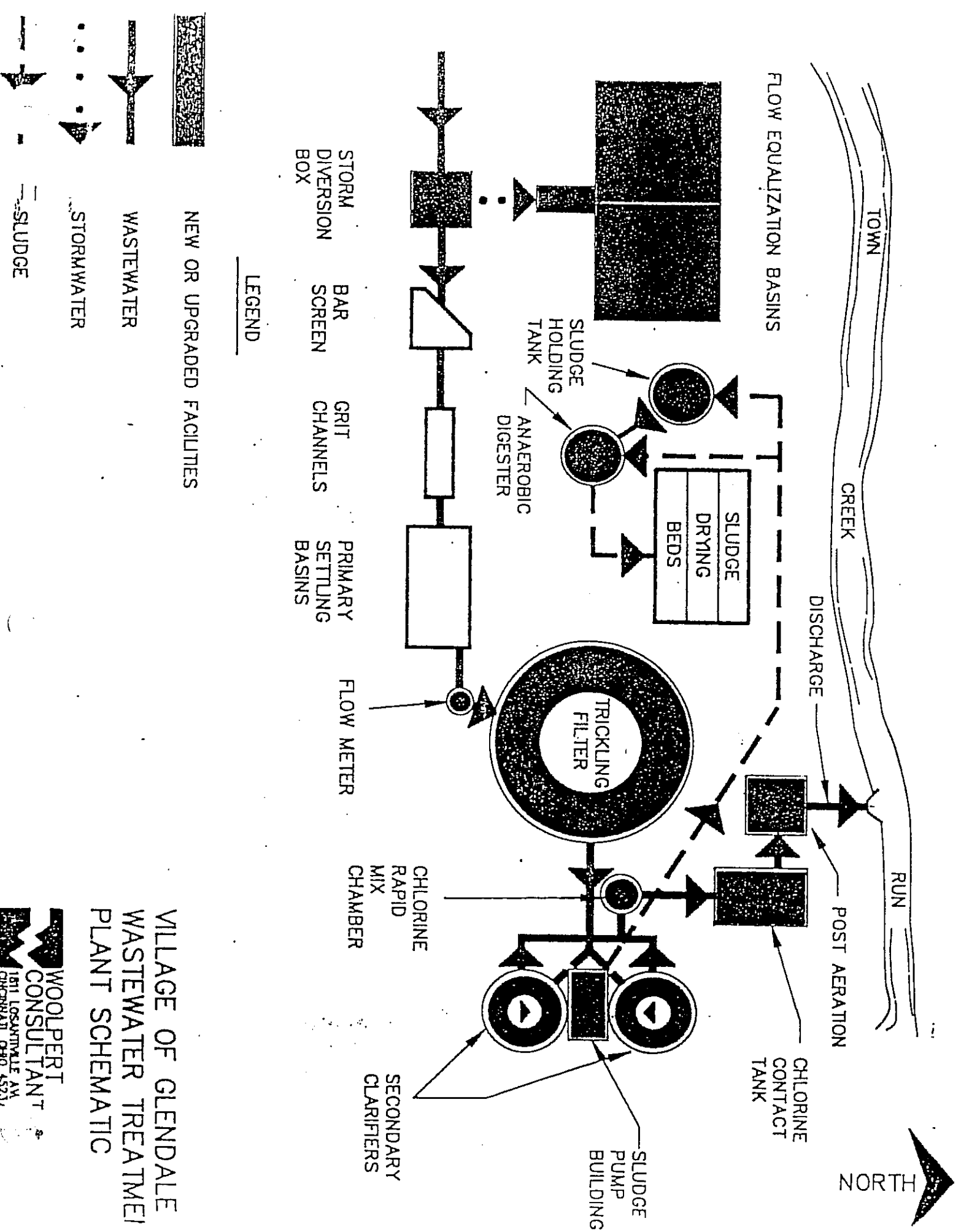


Wast Water Treatment Plant  
528 E. Sharon Road  
Glendale, Ohio 45246

Age: 54/01  
Condition: Excellent  
Construction: Brick/Frame/Pole Building  
Apx. Sq. Footage: 4,900

The Glendale Waste Water Treatment Plant currently treats 349,000 gallons of raw sewage water per 24 hour day during the winter months. In the summer, the amount treated has surpassed 450,000 gallons. Attached are schematics detailing the treatment process that meets EPA standards. Currently, 3 full time employees are assigned to the WWTP and WaterWorks. Glendale intends to establish a sewer user fee in September of '89. The Sewer budget will then be transferred to the enterprise accounts and it will be self supporting. Renovation of the plant in 1987 cost 2,200,000 and was financed with bonds (10 years). Currently, only minor improvements of the older portion of the facility require improvements (\$30,000).

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VILLAGE OF GLENDALE  
WASTEWATER TREATMENT  
PLANT SCHEMATIC

VILLAGE OF GLENDALE  
LANE MILEAGE SUMMARY  
NOVEMBER, 1988

PAGE 1

<u>STREET NAME</u>	<u>FROM</u>	<u>TO</u>	<u>APPROXIMATE LENGTH</u>	<u>NO. LANES</u>	<u>LANE FEET</u>
Albion Avenue	Oak Street	S. Troy	2640	2	5280
Albion Lane	Albion Avenue	Kingfisher	1040	2	2080
Annadale Lane	Jefferson	Terminus	1000	2	2000
Arbor Place	North Lake	Forest	800	2	1600
Chester Road	Sharon Road	Oak Street	4400	2	8800
Church Avenue	Sharon Road	Washington	1200	2	2400
Cleveland Avenue	S. Troy	Terminus	880	2	1760
Cole Avenue	Washington	Terminus	600	2	1200
Congress Avenue	Oak Street	Erie	2720	2	5440
Congress Avenue	Erie	Grove	200	3	600
Congress Avenue	Grove	Sharon Road	200	4	800
Congress Avenue	Sharon Road	S. Lake	280	3	560
Congress Avenue	S. Lake	N. Lake	630	2	1260
Congress Avenue	N. Lake	N. Corp. Line	1130	3	3390
CONGRESS AVENUE			5160		12,050
Coral Avenue	Congress	150' E. of Congress	150	3	450
Coral Avenue	150' E. of Congress	Greenville	3050	2	6100
CORAL AVENUE			3200		6550

<u>STREET NAME</u>	<u>FROM</u>	<u>TO</u>	<u>APPROXIMATE LENGTH</u>	<u>NO. LANES</u>	<u>LANE FEET</u>
Elk Avenue	Greenville	Woodbine	520	2	1040
Erie Avenue	Congress	Forest	800	2	1600
Forest Avenue	W. Fountain	Arbor	1300	2	2600
Forest Place	Forest	Terminus	400	2	800
Fountain Avenue	Willow	320' S. of Willow	320	3	960
Fountain Avenue	320 S. of Willow	E. Fountain	1200	2	2400
FOUNTAIN AVENUE			1520		3360
E. Fountain Avenue	Congress	Fountain	2200	2	4400
W. Fountain Avenue	E. Fountain Avenue	E. Fountain Avenue	700	2	1400
W. Fountain Avenue	Congress	Springfield	600	2	1200
W. FOUNTAIN AVENUE			1300		2600
Glendale	Morse	Walnut	1200	2	2400

<u>STREET NAME</u>	<u>FROM</u>	<u>TO</u>	<u>APPROXIMATE LENGTH</u>	<u>NO. LANES</u>	<u>LANE FEET</u>
Greenville Avenue	Oak Street	Depot Square	3120	3	9360
Greenville Avenue	Depot Square	Coral	1000	2	2000
GREENVILLE AVENUE			4120		11,360
Greenwood Avenue	Walnut	E. Corp. Line	1000	2	2000
Grove Avenue	Congress	Terminus	320	2	640
Ivy Avenue	Oak Street	E. Fountain Avenue	1500	2	3000
Jefferson Avenue	Sharon Road	Washington	1200	2	2400
Kingfisher Drive	Chester	Terminus	2300	2	4600
North Lake Avenue	Congress	Arbor	1240	2	2480
South Lake Avenue	Congress	North Lake Avenue	700	2	1400
Laurel Avenue	Coral	Fountain	1960	2	3920
Lincoln Avenue	Washington	Terminus	600	2	1200
Little Creek Drive	Sharon Road	Terminus	1250	2	2500
Lippelman Road	Greenwood	N. Corp. Line	520	2	1040
Magnolia Avenue	Greenville	E. Fountain Avenue	1400	2	2800
Morse Avenue	Sharon Road	Glendale	1600	2	3200
Myrtle Avenue	Forest	Terminus	100	1	100

<u>STREET NAME</u>	<u>FROM</u>	<u>TO</u>	<u>APPROXIMATE LENGTH</u>	<u>NO. LANES</u>	<u>LANE FEET</u>
Summit Avenue	Sharon Road	Terminus	800	2	1600
North Troy Avenue	Sharon Road	Terminus	1600	2	3200
South Troy Avenue	Sharon Road	Oak Street	3080	2	6160
Walnut Street	Glendale	Greenwood	600	2	1200
Washington Avenue	Congress	Terminus	2880	2	5760
Willow Avenue	Greenville	Depot Square	160	3	480
Willow Avenue	Depot Square	Fountain	160	4	640
Willow Avenue	Fountain	100' N. of Fountain	100	3	300
Willow Avenue	100' N. of Fountain	Coral	<u>1180</u>	2	<u>2360</u>
WILLOW AVENUE			1600		3780
East Willow Avenue	South Troy	Cleveland	1080	2	2160
Wood Avenue	Congress	West Fountain	650	2	1300
Woodbine Avenue	Oak Street	Fountain	2240	2	4480
TOTALS:			87,350'		181,520 Lane Feet
			16.54 Miles		34.38 Lane Miles

Certified by: Mark A. Kluemper, P.E.  
 CDS Associates, Inc.  
 Village Engineer

# WATER INVENTORY

Page 1

Pipe Lengths (Listed by Diameter)

STREET NAME	WATER VALVES	FIRE HYDRANTS	2"3"4"6"8"10"					
			2"	3"	4"	6"	8"	10"
Albion Acres	3					1900'		
Albion Avenue	4	2			3400'			
Albion Lane	4	2				975'		
Annadale Lane	3	2			1200'			
Arbor Place	2					175'		
Chester Road	5	8			2190'	2590'		
Church Avenue	2	2			1200'			
Clark Court	1	2				808'		
Cleveland Avenue	1	2			900'			
Cole Avenue	1	1			560'			
Congress Avenue	7	6			4070'	610'		
Coral Avenue	4	4			2400'			
Bethany School		2				250'		
Elk Avenue								
Erie Avenue	1	1				850'		
Forest Avenue	2	3			1150'			
Forest Place			210'					
Fountain Avenue	4	5			150'	1850'		
F. Fountain Avenue	2	2			1200'			

# WATER INVENTORY

## Pipe Lengths (Listed by Diameter)

STREET NAME	WATER VALVES	FIRE HYDRANT	Pipe Lengths (Listed by Diameter)				
			2"	3"	4"	6"	8"
W. Fountain Avenue	3	1	2"	3"	4"	6"	8"
Glendale					1300'		10"
Grand Avenue (Paper Street)	2	3				1980'	
Greenville Avenue to S. Troy					300'		1540'
Greenville Avenue North of Sharon	1	2					710'
Greenville Avenue South of Sharon	5	4		4260'	1080'	590'	
Hetherington Court		5				545'	2290'
Greenwood Avenue	3	1				410'	
Grove Avenue							
Hedgerow Avenue	1	1					1300'
Ivy Avenue	1	2			1500'		
Jefferson Avenue	2	2			1180'		
Kingfisher Drive	5	5				1930'	
North Lake Avenue	1	1		350'	490'		
South Lake Avenue	1	2		650'			
Laurel Avenue	2	2			1740'		
Lincoln Avenue	1	2			570'		
Little Creek Drive							



# WATER INVENTORY

Page Three

Pipe Lengths (Listed by Diameter)

STREET NAME	Pipe Lengths (Listed by Diameter)					
	2"	3"	4"	6"	8"	10"
Magnolia Avenue	1			600'		
Morse Avenue	1			1560'		
Myrtle Avenue						
Oak Street	7			310'	2420'	2450'
Oak Lane					690'	
Osprey Lane					880'	
Sharon Road and Depot Square	10			620'	2810'	1920' 8390'
Smith Avenue (Paper Street)				340'		
Springfield Pike				1690'		
Summit Avenue	1			650'		
North Troy Avenue	1	790'			720'	
South Troy Avenue	2			1870'		
Walnut Street	1				580'	
Warwick Place	1				1250'	330'
Washington Avenue	4			2730'		
Willow Avenue	1			840'		
East Willow Avenue	1			940'		
Woodbine Avenue	4				2050'	100'

STORM SEWER INVENTORY

Pipe Lengths (Listed by Diameter)

6"	8"	10"	12"	15"	18"	21"	24"	27"	30"	33"	36"
			390	188	256			94		44	16

MISC. STRUCTURES  
Plus 80' 6" x 8" Box  
Culvert

STREET NAME  
Albion Acres Sub'd

CB  $\frac{8}{8}$  MH  $\frac{4}{4}$  HW  $\frac{3}{3}$

Albion Avenue

3 1 1

570 540

Albion Lane

6 5 2

135 130 320 395 95

Annadale Lane

4 2

1400

Arbor Place

Chester Road

Church Avenue

320

Plus 60' of Stone  
Culvert

Clark Court

2 1 1

214

Cleveland Avenue

690 190

Cole Avenue

19 4

1000 760 2930 1040

Congress Avenue

5'x6' Stone Arch  
Culvert - 60' Long  
3'x3' Stone  
Culvert - 60' Long

Congress Avenue  
North to Lake

1 1 2

320 60 440 460 190' - 42"

Congress Avenue  
to Church

3 2

210 170 700 450 20

Coral Avenue

7

440 1270

5' Concrete Pipe  
long  
6'x6' Box Culvert  
36' long



[illegible]

# STORM SEWER INVENTORY

Page Five

## Pipe Lengths (Listed by Diameter)

			6"	8"	10"	12"	15"	18"	21"	24"	27"	30"	33"	36"	MISC. STRUCTURES
<u>CB</u>	<u>MH</u>	<u>HW</u>													
242	65	14	910	8160	8350	25817	6580	8258	770	2461	94	545	60	996	750' - 16"
															390' - 42"
															38' - 60"
															80' - 90"
															2-Junction Boxes
															1205' - Culverts
															Avg. Approx. Siz.
															650' - Stone Sew.

TOTALS:

# SANITARY SEWER INVENTORY

Page 1

STREET NAME	NO. OF MH'S	Pipe Length (Listed by Diameter)				MISC. STRUCTURES
		8"	10"	12"	15"	
Albion Acres Sub'd	8	1976				190'-4" F.M. & Pump Station
Albion Avenue to Procter	6		560'			
Albion Avenue to Grand	1				710'	
Albion Avenue	14	1175		50'	670'	
Albion Lane	3	778				
Albion Lane to Kingfisher	10	1970				
Annadale Lane	5	1000				
Arbor Place						
Brandywine Drive to Creekwood	7			1600'		
Chester Road	8	1950'				
Church Avenue	5	1142'				
Clark Court	2	230'				
Cleveland Avenue	1	700'				
Cole Avenue	2	573'				
Congress Avenue	23	5221'				
Coral Avenue	14	1060'				2630'

STREET NAME	NO. OF MH'S	Pipe Lengths (Listed by Diameter)				MISC STRUCTURES
		8"	10"	12"	15"	
Creekwood to WWTP	8			2150'		
Elk Avenue	2	545'				
Erie Avenue to Sharon Road	3	560'				
Forest Avenue	1	310'				
Forest Place to Laurel	1	600'				
Fountain Avenue	10	2160'				
Fountain Avenue to Ivy	1	600'				
Garfield Avenue	4	656'				
Glendale Avenue						
Grand Avenue	7	120'			1070'	
Grand Avenue South of Albion	11	1500'		1200'		
Greenville Avenue	15	2000'		1110'		
Hetherington Court	12			2140'		
Greenwood Avenue	1			235'		
Grove Avenue to Sharon Road	5			650'		
Ivy Avenue	3			360'		
Ivy Avenue to Woodbine	0			600'		

SANITARY INVENTORY

STREET NAME	NO. OF MH'S	Pipe Lengths (Listed by Diameter)		
		8"	10"	12" 15" MISC STRUCTURES
Jefferson Avenue	2	880'		
Jefferson Avenue to Congress	3	2630'		
Kingfisher Drive-North	7	1342'		
Kingfisher Drive-South	11	2300'		
North Lake Avenue	8	1640'		
North Lake to Coral	1	565'		
South Lake Avenue	8	1330'		
Laurel Avenue	3	675'		
Lincoln Avenue	1	583'		
Lincoln to Garfield		274'		
Magnolia Avenue	8	2095'		
Morse Avenue	2	870'		
Myrtle Avenue to Forest	7	1040'		
Oak Street	6	1680'		
Oak Street to Albion	5	1250'		
Osprey Lane				
Procter Avenue (Paper Street)	3	800'		
Procter Avenue	7	1150'		



# SANITARY SEWER INVENTORY

Page Four

Pipe Lengths (Listed by Diameter)

<u>STREET NAME</u>	<u>NO. OF MH'S</u>	<u>Pipe Lengths (Listed by Diameter)</u>				<u>MISC. STRUCTURES</u>
		8"	10"	12"	15"	
Sharon Road	48	6220'	1125			460' - 6" 1930' - 18" 1190' - 24"
Springfield Pike						
Summit Avenue	5	1675'				
North Troy Avenue	5	925'			568'	
South Troy Avenue	5			1560'		
Van Ness	2	500'				
Walnut Street	2	580'				
Warwick Place	11	1124'				395' 18"
Washington Avenue	7	2417'				
Willow Avenue	10	1650'				
East Willow Avenue	3	970'				
Woodbine Avenue	4	750'	260'			
Woodbine to Greenville			510'			
<b>TOTALS:</b>	<b>373</b>	<b>68161'</b>	<b>3020'</b>	<b>7670'</b>	<b>5648'</b>	<b>460' - 6" 1930' - 18" 1190' - 24" 190' - 4" FM 1 Pump Station</b>



1992

AN INVENTORY OF PROJECTED  
FIVE YEAR CAPITAL IMPROVEMENT NEEDS

PROJECT	CONDITION	ESTIMATED COST
1) Sharon Ave Rest.	Very Poor *	\$230,000
2) Phase I Water Mains	Very Poor *	\$114,000
3) Phase II " "	Very Poor *	\$352,000
4) Phase III Water Tower	Very Poor	\$466,000
5) Phase IV Water Mains	Poor	\$284,000
6) Well #1 Restoration	Poor	\$ 60,000
7) Phase V Water Mains	Poor	\$276,000
8) Lime Filter Rest.	Poor	\$ 14,000
9) Village Office Rest.	Poor	\$155,000
10) Well Controls	Fair	\$ 15,000

\* Project #1, #2, and #3 are in progress, scheduled completion in the fall of 1991.

## EXISTING CAPITAL IMPROVEMENT STUDY

<u>Year Existing Capital Improvement</u>	<u>Condition</u>
1985 Sewer Plant Renovation (EPA Stds)	Excellent
1985 Sidewalk, Pase 4 rebuilding	Excellent
1985 Tar/Chip program, 5 Roads	Good
1986 Sidewalk, Phase 5 rebuilding	Excellent
1986 Tar/Chip program, 6 Roads	Good
1986 Congress Rd. Curbing/drainage	Excellent
1987 Sidewalk, Phase 1 rebuilding	Excellent
1987 Tar/Chip program, 4 roads	Good
1988 Police Station Renovation	Excellent
1988 Recycling Center Renovation	Good
1988 Fuel Tank removal, EPA Stds.	Excellent
1988 Sidewalk, Phase 2 rebuilding	Excellent
1988 Tar/Chip program, 6 roads	Good
1988 Rebuild N. Troy (CD Grant)	Excellent
1989 Sidewalk Bridge Replacement	Excellent
1989 Sidewalk, Phase 3 rebuilding	Excellent
1989 Restoration of Village Parking Lots	Good
1989 Tar/Chip program, 5 roads	Good
1989 Primary settling basin rebuild	Good
1990 Sidewalk, Phase 4 rebuilding	Excellent
1990 Chester Road Rebuilding (Issue 2 '89)	Excellent
1990 Tar/Chip program, 8 roads	Good



WOOLPERT

October 31, 1989

Mayor Harry Matthews  
Village of Glendale  
30 Village Square  
Glendale, OH 46246

RE: Water System Analysis  
Findings and Recommendations

Dear Mayor Matthews:

We have completed our study of the Glendale Water System and herewith transmit our findings for your review. We are transmitting four (4) draft copies of our final report for your comments.

Please return one (1) copy of the draft with your comments. We will then finalize the report. Please call me if you have any questions or require additional information.

Very truly yours,

WOOLPERT CONSULTANTS

Dale L. Flaherty, P.E.  
Partner

DLF/dw  
#50-16933-01

= 1992 ISSUE 2 APPLICATION

GLENDALE  
Water Main Renovation Plan

Cost Estimates of System Renovations

<del>10" Main along Sharon Road, Jefferson Avenue from Booster to Washington</del>	<del>3900 LF</del>	<del>234,500</del>
<del>Booster</del>		<del>12,000</del>
Water Storage Tank	250,000 gal.	350,000
<del>8" Main along Congress Avenue from Sharon Road to Washington Avenue</del>	<del>1200 LF</del>	<del>153,700</del>
8" Main along Washington Avenue from Congress Avenue to Jefferson Avenue	1900 LF	\$ 95,950
8" Mains along Washington Avenue, Lincoln Avenue Avenue and Cole Avenue	1850 LF	\$ 92,850
8" Main along Greenville Avenue from Magnolia Avenue to Willow Avenue	1850 LF	\$ 82,700
8" Main along Greenville Avenue from Magnolia Avenue to Oak Road	750 LF	\$ 34,300
8" Main along Albion Avenue Avenue from Greenville Avenue to Hedgerow Lane	1200 LF	\$ 52,150
8" Main along Albion Avenue, south along Albion Street, west along Oak Road	2350 LF	\$ 99,400
8" Main along Laurel Avenue from Sharon Road to Coral Avenue	950 LF	\$ 45,600
8" Main along Willow Avenue from Sharon Road to Coral Avenue	850 LF	\$ 41,400
8" Main along Morse Avenue from Sharon Road to Glendale Avenue	1600 LF	\$ 73,650
8" Main along Troy Avenue from Sharon Road to Glendale Avenue	1550 LF	\$ 70,050
8" Main along Coral Avenue from Laurel Avenue to Willow Avenue	700 LF	\$ 24,850
<del>8" Main along Chester Road and north on Oak Road</del>	<del>1000 LF</del>	<del>138,200</del>
8" Main west of Chester Road	250 LF	\$ 9,800
8" Main along Congress north of Washington	600 LF	\$ 30,450
8" Main along Church Street	1200 LF	\$ 56,100

8" Main N. Lake and S. Lake Avenue loop	1500 LF	\$ 64,550
8" Main along Congress from Fountain Avenue to Sharon Road	2350 LF	\$102,300
8" Main along Fountain Avenue and north along Springfield Pike	1500 LF	\$ 60,000
8" Main along Fountain Avenue and West Fountain	1650 LF	\$ 67,650
8" Main along Forest Avenue from West Fountain to Arbour Place	1200 LF	\$ 52,500
8" Main along Ivy Avenue from Oak Road to Fountain Avenue	1800 LF	\$ 74,600
8" Main along Coral Avenue from Congress Avenue to Laural Avenue	1600 LF	\$ 71,450
8" Main along Laural Avenue from Sharon Road to Fountain Avenue and halfway up Myrtle Avenue	1350 LF	\$ 58,650
8" Main along Magnolia Avenue from Greenville Avenue to Woodbine Avenue	600 LF	\$ 26,350
8" Main along Chester Road from Sharon Road south off of Chester Road to a point 250 ft. from Chester Road	2150 LF	<u>\$ 81,650</u>
Subtotal		\$2,139,350
10% Contingency		213,650
Engineering Design		<u>100,000</u>
TOTAL		\$2,453,000

Note: Cost of main includes cost of pipe, excavation and backfill, bedding, pavement restoration, service transfers with valve box, valves, hydrant trees, and tees.

#16933-02

VILLAGE OF GLENDALE, OHIO

WATER SYSTEM STUDY REPORT

OCTOBER 1989

PURPOSE

The purpose of this report is to provide the Village of Glendale with a plan for the orderly sequencing of improvements and additions to their water supply system to alleviate their immediate low pressure problems. Additionally, recommendations will be made for future system enhancements to further improve the ability of the system to meet the customer's demands and fire flow requirements.

The scope of this study is limited to the transmission and distribution system of the Village of Glendale. The analyses were conducted using a computer model which was based upon information provided by the Village of Glendale. Field verifications of the model were not included in the scope of this project. The recommendations found in this report will address the need for such verification.

SUMMARY

The pressure problems experienced throughout the system during the hot/dry weather are directly attributable to the large number of irrigation systems currently in use throughout Glendale and the small mains throughout the system. The water system is old and was designed and constructed at a time when irrigation systems were not envisioned as can be seen from the list of pipe sizes and lengths. The large number of 3" through 4" mains testify to this fact:



<u>Main Size</u>	<u>Pipe Length</u>	<u>Approximate Max. Carrying Capacity (Gallons/Minute)</u>
1	1,200	26
3	2,885	220
3 1/2	420	280
4	38,140	380
6	25,875	850
8	12,275	1,500
10	9,900	2,400

The analysis of the system model indicates that there are three areas within the Village where improvements are necessary to supply adequate flows and pressures for fire protection. These areas are: 1) The northwest section of the Village north of Sharon Road and west of Congress Avenue; 2) The area between Sharon Avenue and Greenwood Avenue, and Grove Avenue and Maple Avenue; and 3) The area along the west side of the railroad tracks between Oak Street and Willow Avenue. According to the analysis, the major reason for the low supply problems with the current demands is the small mains feeding these areas.

It has been found that lawn sprinkling accounts for as much as 75 percent of the total daily volumes and as high as 95 percent of the peak hourly demands where large residential lots are prevalent such as Glendale. Obviously, with an old system like Glendale's whose mains were designed to carry only normal residential and fire flows, the drain on the distribution system capacity is significant.

#### WATER USE

Water use records obtained from the Village of Glendale were used to develop the average daily and maximum daily demands for the system.

The maximum hourly demand was assumed to be 6.0 times the average daily demand based upon experience with similar communities in the area. Following are the demands used for this study:

Average Day = 218 gallons/minute  
Maximum Day = 436 gallons/minute  
Maximum Hour = 1,308 gallons/minute

System performance was judged based upon the pressures at maximum hour demands and the pressures at maximum day demands plus fire flows at specified locations. The deficiencies noted in the system and recommendations for their correction will be discussed in the following section.

#### SYSTEM DEFICIENCIES AND RECOMMENDED SOLUTIONS

##### I. FIRE FLOWS

Based upon the analyses conducted, the following areas were found deficient in their ability to provide adequate fire flows.

A. Northwest - The northwest area of Glendale generally bounded by Sharon Avenue on the south, Laurel Avenue on the east, and the Village Boundary on the west and north, cannot be provided with adequate fire protection. The apparent reasons for this lack of capacity are as follows:

1. 4" mains supplying the area.
2. Inadequate booster pump. The pump is rated at 750 gallons per minute and will boost the pressure approximately 30 psi. The minimum recommended fire flow to this area is 1,000+ gallons per minute.

3. Low suction pressures to the booster pumps. The suction main to the pump is 6" diameter which will supply a maximum of 850 gpm.
4. High demands upstream of the booster pump. The high sprinkler demands in the areas upstream of the booster pump reduce the available suction pressure to the pump.

Recommendations - It is recommended that the following steps be taken to increase the available fire flow to this area.

- a. Install approximately 6,000 feet of 8" main to replace the existing 3", 4" and 6" mains from the existing 8" main at Arbor Place and Sharon Avenue, west in Sharon Avenue to Congress Avenue then north in Congress Avenue to Washington Avenue to Lincoln Avenue then north in Lincoln Avenue to the Village Boundary. Also, from Washington Avenue and Cole Avenue north in Cole Avenue to the Village Boundary.
- b. Replace the booster pump with a pump rated at approximately 1,500 gpm and boost the pressure approximately 50 psi. The pump should be provided with a variable speed constant pressure drive and be capable of bypassing from the suction to discharge if suction pressures are adequate.
- c. Restrict the addition of lawn sprinklers within the system upstream and downstream of the booster pump until improvements are made within the system to increase the carrying capacity of the system.

d. Institute a sprinkler ordinance which will limit the time of day allowed for sprinkling to the off peak hours (midnight to 6 a.m.). These restrictions will serve to even out the daily demands and provide increased capacity in the entire system.

B. Northeast Area - The northeast area of Glendale generally bounded by Sharon Avenue on the south, Greenwood Avenue on the north, Chester Avenue on the east and Troy Avenue on the west cannot provide sufficient fire flows. The only detectable reasons for this deficiency is the lack of carrying capacity of the 4" main leading to this area and the lack of a looped system.

Recommendations - It is recommended that the existing 4" main in Morse Avenue from Sharon Avenue to Glendale Avenue be replaced with a new 8" main approximately 1,600 feet long. Also, loop the mains in this area to provide alternate feeds. The looped system will reduce service outages caused by main breaks. The recommended alternate supply would be connected to the existing 10" main at Sharon Avenue east of Little Creek Lane then north along the Glendale/Sharonville boundary to Greenwood Avenue and Walnut Avenue. An additional loop should be considered between the existing 3" main at Troy Avenue and Glendale Avenue to the main in Glendale Avenue at Morse Avenue.

C. South Greenville Avenue - The water main in Greenville Avenue from Oak Street to Willow Avenue cannot provide adequate fire flow and pressure. The main is 3" and 4" in diameter and is fed by 4", 6" and 8" mains. The main parallels the railroad

tracks and as such has the potential for high demands, should a fire occur or hazardous materials spill occur on the railroad.

Recommendations - It is recommended that a new 8" main be installed in Greenville Avenue from Oak Street to Willow Avenue and connect to the two 6" mains in Willow Avenue.

## II. MISCELLANEOUS

The analysis conducted indicated other weak areas in the Glendale system which should be addressed.

A. Main Replacement Program - The 1", 3", 3-1/2" and 4" mains in the Glendale system are undersized for today's demands and should be replaced with larger pipes. These undersized mains are also old and are responsible for a majority of the main breaks and loss of service in the system.

Recommendations - The Village of Glendale should institute a long-range program to replace all undersized mains with new 8" diameter mains. The resultant increase in carrying capacity and reduction of maintenance cost can justify the expense. The increased Insurance Services Office rating of the community will improve and insurance rates will go down accordingly. The total length of new 8" main will be approximately 36,000 feet.

B. System Looping - There are several locations within the Glendale system which are not looped. Looping a water system increases the system's carrying capacity and reliability. The water will be fed from two directions which serves to reduce

head losses and provide alternate feeds when it is necessary to shut down a main for repairs. The following two areas can be looped easily to provide this designed effect.

Recommendations -

1. Loop the Chester Avenue 6" main to the existing 4" main running south and west from Chester Avenue in easements. The connection would be an 8" main approximately 300 feet long.
2. Loop the 6" main in Chester Avenue south of Kingfisher Drive to the 6" main in Oak Street east of Albion Street. This 8" connection would be approximately 700 feet long.

APPROXIMATE COSTS

The following approximate costs of recommended improvements are provided to assist the Village of Glendale in budgeting. The costs are based upon 1989 dollars. The various improvements are shown on Figure Number I attached.

- 1a. Installation of approximately 6,000 ft. of 8" main in Sharon Avenue, Congress Avenue, Washington Avenue, Lincoln Avenue and Cole Avenue:

6,000 LF 8" Main @ \$17.00/LF	=	\$102,000
14 - 8" Valves @ \$700 each	=	9,800
8 - Hydrant Trees @ \$350 each	=	2,800
9 - Tees @ \$400 each	=	3,600
10 - Reducers @ \$450 each	=	4,500
400 LF Pavement @ \$12.00/LF	=	4,800
6000 LF Restoration @ \$2.00/LF	=	12,000
		<u>\$139,500</u>
+ 10% Contingency		14,000
SUBTOTAL		<u>\$153,500</u>

- 1b. Installation of new booster pump, controls and piping revisions:

Pump and Controls	=	\$ 9,000
Piping Revisions	=	<u>3,000</u>
		\$ 12,000
+ 10% Contingency		<u>1,200</u>
SUBTOTAL		\$ 13,200
Total 1a + 1b		\$166,700
Design and Engineering		<u>18,000</u>
TOTAL COST		\$184,700

2. Northeast Area - Installation of approximately 1,600 LF of 8" main.

1,600 LF 8" Main @ 17.00/LF	=	\$27,200
3 - 8" Gate Valves @ \$700/ea.	=	<u>2,100</u>
4 - Tees @ \$400/ea.	=	1,600
3 - Hydrant Tees @ \$350/ea.	=	<u>1,050</u>
1 - 90' Bend @ \$250/ea.	=	250
8 - Reducers @ \$450/ea.	=	<u>3,600</u>
150 LF Pavement Replacement @ \$12.00/LF	=	1,800
1,600 LF Restoration @ \$2.00/LF	=	<u>3,200</u>
		\$40,800
+ 10% Contingency		<u>4,100</u>
TOTAL		\$44,900
Design Engineering		<u>4,500</u>
TOTAL COST		\$49,400

3. South Greenville Avenue - Installation of approximately 2,600 LF of 8" main.

2,600 LF 8" Main @ \$17.00/hr.	=	\$44,200
4 - 8" Gate Valves @ \$700/ea.	=	<u>2,800</u>
4 - Hydrant Tees @ \$350/ea.	=	1,400
3 - Tees @ \$400/ea.	=	<u>1,200</u>
8 - Reducers @ \$450/ea.	=	3,600
200 LF Pavement Replacement @ \$12.00/LF	=	<u>2,400</u>
2,000 LF Restoration @ \$2.00/LF	=	<u>5,200</u>
		\$60,800
+ 10% Contingency		<u>6,100</u>
TOTAL		\$66,900
+ Design Engineering		<u>6,700</u>
TOTAL COST		\$73,600

4. Replacement of all water mains 4" and smaller throughout the Glendale system. The following estimate is based upon installation of approximately 36,000 LF of 8" water main over a 6-year period. The costs are calculated for one year during the proposed main replacement program.

Replacement Per Year for 6 Years

6,000 LF of 8" main @ \$17.00/LF	=	\$102,000
12 - 8" Gate Valves @ \$700/ea.	=	8,400
9 Hydrant Tees @ \$350/ea.	=	3,150
9 Tees @ \$400/ea.	=	3,600
13 Reducers @ \$450/ea.	=	5,850
2 - 90" Elbows @ \$250/ea.	=	500
400 LF Pavement Replacement @ \$12.00/LF	=	4,800
6000 LF Restoration @ \$2.00/LF	=	12,000
		<u>\$140,300</u>
+ 10% Contingency		14,000
		<u>\$154,000/yr.</u>
		x 6
		<u>\$924,000</u>
+ Design & Engineering		64,680
Total Cost for Main Replacement		<u>\$988,680</u>

5. Providing additional loops for the Glendale system.

1,000 LF 8" Main @ \$17.00/LF	=	\$17,000
1 - 8" Gate Valve @ \$700/ea.	=	700
2 - Hydrant Tees @ \$400/ea.	=	800
2 - 8" Tees @ \$400/ea.	=	800
2 Reducers @ \$450/each	=	900
150 LF Pavement Replacement @ \$12.00/LF	=	1,800
1,000 LF Restoration @ \$2.00/LF	=	2,000
		<u>\$24,000</u>
+ 10% Contingency		2,400
		<u>\$26,400</u>
+ Design Engineering		3,400
Total Cost for Additional Loops		<u>\$29,800</u>



#### ADDITIONAL RECOMMENDATIONS

It is recommended that the Village of Glendale institute the following programs to help assure a safe, ample supply of waters for their customers:

1. A study of the existing water filter plant to determine its capability, adequacy, and reliability. The study should look in detail at the wells, treatment and storage facilities and the equipment throughout the plant.
2. Commission a thorough inspection of the existing elevated storage tank to determine its structural integrity. The inspection should precipitate a report recommending whether the existing tank can be maintained and continue to provide adequate service or that it should be replaced.
3. Develop a plan to systematically inspect each valve within the system to determine its location, type, whether it is open or closed, and to assure that it is operational. The inspection should be an ongoing program to assure that when any portion of the system requires a shut down for maintenance, there will be minimum service interruptions.
4. Institute a systematic main flushing program to reduce dirty water complaints, avoid stagnant water and reduce buildup of friction causing scale within the piping system.
5. Based upon information collected above, systematically conducted fire hydrant flow tests, and obtain verification of the computer model. The verified system model will be used accurately to predict the effects of increased development and of additional sprinkler systems will have on the system. \*

OHIO INFRASTRUCTURE BOND PROGRAM (ISSUE 2)  
LOCAL TRANSPORTATION IMPROVEMENT PROGRAM (LTIP)  
DISTRICT 2 - HAMILTON COUNTY  
1992 PROJECT SELECTION CRITERIA

JURISDICTION/AGENCY: GLENDALE

PROJECT IDENTIFICATION: PHASE III WATER TOWER

PROPOSED FUNDING:

ELIGIBLE CATEGORY:

POINTS

- 5 1) Type of project
- 10 Points - Bridge, road, stormwater
  - 5 Points - All other projects
- 10 2) If Issue 2/LTIP funds are granted, how soon after the Project Agreement is completed would a construction contract be awarded? (Even though the jurisdictions will be asked this question, the Support Staff will assign points based on engineering experience.)
- 10 Points - Will definitely be awarded in 1992
  - 5 Points - Some doubt whether it can be awarded in 1992
  - 0 Points - No way it can be awarded in 1992
- 15 3) What is the condition of the infrastructure to be replaced or repaired? For bridges, base condition on latest general appraisal and condition rating.
- 15 Points - Poor condition
  - 10 Points - Fair to Poor condition
  - 5 Points - Fair condition

NOTE: If infrastructure is in "good" or better condition, it will NOT be considered for Issue 2/LTIP funding, unless it is a betterment project that will improve serviceability.

5

- 4) If the project is built, what will be its effect on the facility's serviceability?

5 Points - Significantly effects serviceability (add lanes)  
4 Points -  
3 Points - Moderately effects serviceability (widen lanes)  
2 Points -  
1 Point - Have little or no effect on serviceability

3

- 5) Of the total infrastructure within the jurisdiction which is similar to the infrastructure of this project, what portion can be classified as being in poor or worse condition, and/or inadequate in service?

3 Points - 50% and over  
2 Points - 30% to 49.9%  
1 Point - 10% to 29.9%  
0 Points - Less than 10%

10

- 6) How important is the project to the health, welfare, and safety of the public and the citizens of the District and/or the service area?

10 Points - Significant importance  
8 Points -  
6 Points - Moderate importance  
4 Points -  
2 Points - Minimal importance

6

- 7) What is the overall economic health of the jurisdiction?

10 Points - Poor  
8 Points -  
6 Points - Fair  
4 Points -  
2 Points - Excellent

10

- 8) What matching funds are being committed to the project, expressed as a percentage of the TOTAL CONSTRUCTION COST? Matching funds may be local, Federal, ODOT, MRF, etc. or a combination of funds. Loan and credit enhancement projects automatically receive 10 points.

5 Points - More than 50%  
4 Points - 40% to 49.9%  
3 Points - 30% to 39.9%  
2 Points - 20% to 29.9%  
1 Point - 10% to 19.9%

MINIMUM 10% MATCHING FUNDS REQUIRED FOR GRANT-FUNDED PROJECTS

5

- 9) Has any formal action by a Federal, State, or local governmental agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure? Examples include weight limits on structures and moratoriums on building permits in a particular area due to local flooding downstream. Points can be awarded ONLY if construction of the project being rated will cause the ban to be removed.

10 Points - Complete ban  
5 Points - Partial ban  
0 Points - No ban

4

- 10) What is the total number of existing daily users that will benefit as a result of the proposed project? Appropriate criteria includes traffic counts & households served, when converted to a measurement of persons. Public transit users are permitted to be counted for roads and bridges, but only when certifiable ridership figures are provided.

10 Points - 10,000 and Over  
8 Points - 7,500 to 9,999  
6 Points - 5,000 to 7,499  
4 Points - 2,500 to 4,999  
2 Points - 2,499 and Under

1

- 11) Does the infrastructure have regional impact? Consider originations & destinations of traffic, size of service area, number of jurisdictions served, functional classification, etc.

5 Points - Major impact  
4 Points -  
3 Points - Moderate impact  
2 Points -  
1 Point - Minimal or no impact

TOTAL AVAILABLE POINTS:

PROJECTS FUNDED BY GRANTS = 93 POINTS

PROJECTS FUNDED BY LOANS OR CREDIT ENHANCEMENTS = 98 POINTS